

Title (en)

THREE DIMENSIONAL DEPTH MAPPING USING DYNAMIC STRUCTURED LIGHT

Title (de)

DREIDIMENSIONALE TIEFENKARTIERUNG MIT DYNAMISCHEM STRUKTURIERTEM LICHT

Title (fr)

MAPPAGE DE PROFONDEUR TRIDIMENSIONNEL UTILISANT UNE LUMIÈRE STRUCTURÉE DYNAMIQUE

Publication

EP 3060941 A1 20160831 (EN)

Application

EP 14796912 A 20141023

Priority

- US 201361894471 P 20131023
- IL 2014050922 W 20141023

Abstract (en)

[origin: WO2015059705A1] Apparatus for generating a dynamic structured light pattern for optical tracking in three-dimensional space, comprises an array of lasers, such as a VCSEL laser array, to project light in a pattern into a three-dimensional space; and an optical element or elements arranged in cells. The cells are aligned with subsets of the laser array, and each cell individually applies a modulation, in particular an intensity modulation, to light from the laser or lasers of the subset, to provide a distinguishable and separately controllable part of the dynamic structured light pattern. A method of generating a structured light pattern is disclosed, in which light is provided from an array of lasers, and light is individually projected from subsets of the array of lasers to provide differentiated parts of the structured light pattern.

IPC 8 full level

G01S 17/46 (2006.01); **G01B 11/25** (2006.01); **G01S 7/481** (2006.01); **G01S 17/89** (2020.01); **G02B 27/42** (2006.01); **H01S 5/42** (2006.01)

CPC (source: CN EP KR US)

G01S 7/4815 (2013.01 - CN EP KR US); **G01S 17/46** (2013.01 - CN EP KR US); **G01S 17/89** (2013.01 - CN EP KR US); **G02B 27/4205** (2013.01 - CN EP KR US); **G02B 27/4255** (2013.01 - CN EP KR US); **G06F 3/017** (2013.01 - CN EP KR US); **G06F 3/0304** (2013.01 - CN EP KR US); **G06F 3/0321** (2013.01 - CN EP KR US); **H01S 5/423** (2013.01 - KR); **H04N 13/128** (2018.05 - EP KR US); **H04N 13/207** (2018.05 - EP KR US); **H04N 13/282** (2018.05 - EP KR US); **H04N 13/296** (2018.05 - EP KR US); **H01S 5/423** (2013.01 - EP US)

Citation (examination)

US 2010008588 A1 20100114 - FELDKHUN DANIEL [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015059705 A1 20150430; AU 2014338511 A1 20160421; AU 2014338511 B2 20180809; BR 112016009202 A8 20200324; CA 2924622 A1 20150430; CA 2924622 C 20200310; CN 105659106 A 20160608; CN 105659106 B 20181228; EP 3060941 A1 20160831; IL 245002 A0 20160531; IL 245002 B 20190228; JP 2016540189 A 20161222; JP 2019164144 A 20190926; JP 6547104 B2 20190724; KR 102027184 B1 20191001; KR 20160075548 A 20160629; MX 2016005338 A 20170320; US 10091494 B2 20181002; US 10687047 B2 20200616; US 11057610 B2 20210706; US 11962748 B2 20240416; US 2016286202 A1 20160929; US 2018324412 A1 20181108; US 2020267377 A1 20200820; US 2021297651 A1 20210923

DOCDB simple family (application)

IL 2014050922 W 20141023; AU 2014338511 A 20141023; BR 112016009202 A 20141023; CA 2924622 A 20141023; CN 201480058469 A 20141023; EP 14796912 A 20141023; IL 24500216 A 20160410; JP 2016519386 A 20141023; JP 2019081994 A 20190423; KR 20167011475 A 20141023; MX 2016005338 A 20141023; US 201415030851 A 20141023; US 201816032304 A 20180711; US 202016859871 A 20200427; US 202117339559 A 20210604